asked for prices Dec 30/98 C

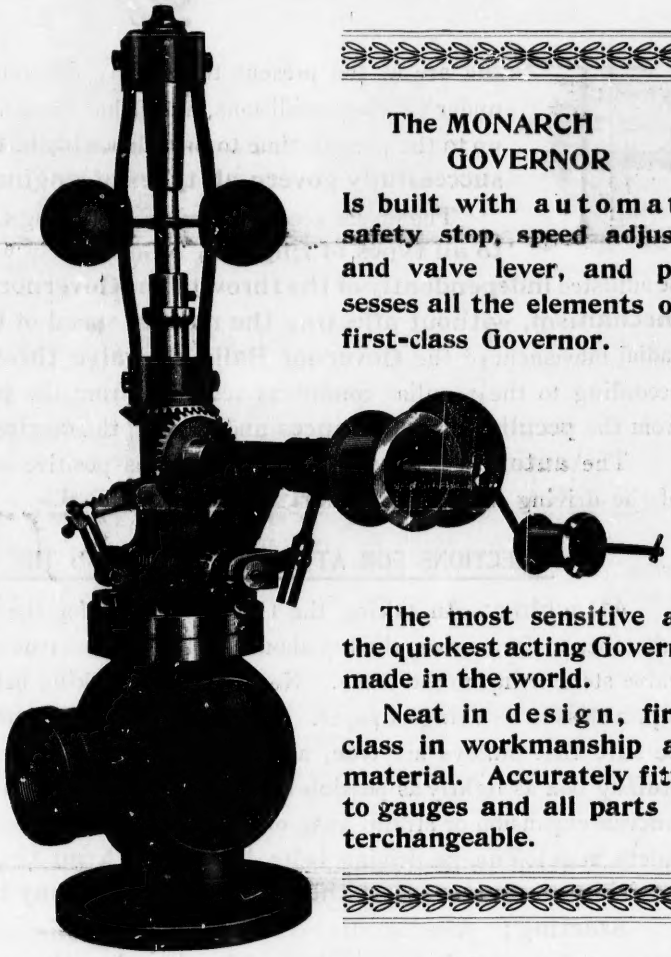
The Monarch Governor

THE ONLY GOVERNOR ON EARTH THAT WILL ACCURATELY REGULATE ANY TYPE OF ENGINE

PATENTED in the United States and Canada, and all the principal countries of the world.

Adapted to all varieties of Steam Engines and fitted with special valve chambers to suit any style of Gas Engine of the throttling type.

The valve throw of this Governor being adjustable independently of the radial throw of the Governor Balls or the normal speed of the engine, the closest possible regulation can be obtained for any style of engine or motor to which a throttling Governor can be used.



The MONARCH GOVERNOR

Is built with automatic safety stop, speed adjuster and valve lever, and possesses all the elements of a first-class Governor.

The most sensitive and the quickest acting Governor made in the world.

Neat in design, first-class in workmanship and material. Accurately fitted to gauges and all parts interchangeable.

THE MONARCH GOVERNOR, Manufactured by

THE MONARCH GOVERNOR & MACHINE CO.,

INCORPORATED,

740 to 750 East Washington Street,

INDIANAPOLIS, INDIANA, U. S. A.

The Object of the Monarch Governor

THERE are at the present time many different types of engines, all working under varying conditions, and it has been found to be practically impossible up to the present time to provide a **single type of Governor** which would **successfully govern all types of engines.**

The object accomplished in producing this Governor is its **adaptability to all types of Engines,** a Governor in which the throw of the valve may be adjusted **independently of the throw of the Governor Balls** or other **speed controlled mechanism, without affecting the normal speed of the engine,** so that for a given radial movement of the **Governor Balls,** the **valve throw** may be made greater or less, according to the peculiar conditions resulting from the **particular type** of the engine or from the **peculiar circumstances** under which the **engine may be working.**

The **automatic stop** of this Governor is positive and is **adjustable** to **any angle** of the driving belt whether **horizontal** or **vertical.**

DIRECTIONS FOR ATTACHING AND USING THE MONARCH GOVERNOR

Attaching: In taking the Governor apart for the purpose of attaching the valve chamber to the engine, the top should be lifted off as true as possible, so as not to bend the valve stem or injure the valve. Never put any packing between the valve chamber and the top, unless it be a ring of paper. Arrange pulley diameters to run engine the desired speed; be sure that pulleys are true, and use a thin, even belt for driving the Governor. Pack stuffing box as lightly as possible so as not to bind the stem. If the valve sticks on account of uneven expansion or strain, ease off a little with fine emery cloth. Adjust idler pulley of safety stop to engage driving belt; **be sure to keep the weight arm in a horizontal position no matter what the angle of the belt may be.** Keep Governor well oiled.

Starting: After starting the engine, the throw of the Governor valve should be **increased as much as possible without racing the engine,** in order to get the **closest possible regulation obtainable** under the conditions which that **particular engine** may be running. This is accomplished by moving the **valve link out** along the notches on the bar of the upper lever, **thus increasing the valve throw.** If, on the other hand, the engine races or runs irregular, the **valve throw should be decreased** just enough to steady the engine, by moving the **valve link in** along the bar of the upper lever. For **heavy duties** the throw of the valve may be **increased** far beyond the normal valve throw in the average governor without **affecting** the **radial throw of the Governor Balls or the speed of the engine.** Next adjust the speeder if necessary.

Class A.
With Automatic Stop, Speed Adjuster and Valve Lever.

Class B.
With Speed Adjuster and Valve Lever.

Style C.
Screwed Connections.

Style D.
Flange Base Screw Side.

Style E.
Flanged Connections.

Special Valve Chambers will be Fitted to Governors if Necessary.

We carry a complete stock of all sizes mentioned below :

PRICE LIST OF THE MONARCH GOVERNORS.

Size of Governor..	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	9	10
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
Class A, plain. ..	16 50	18 50	21 00	24 50	29 50	36 00	48 00	59 00	71 00	83 00	96 00	109 00	140 00	170 00	210 00	241 00	270 00
Class B, "	14 00	16 00	18 00	21 00	25 00	30 00	40 00	50 00	60 00	71 00	83 00	94 00	122 00	150 00	185 00	215 00	240 00
Class A, finished	18 50	20 50	23 00	27 00	33 50	40 00	53 00	67 00	80 00	93 00	107 00	121 00	154 00	186 00	227 00	261 00	290 00
Class B, "	16 00	18 00	20 00	24 00	29 00	34 00	45 00	58 00	69 00	81 00	94 00	106 00	136 00	166 00	202 00	235 00	260 00

We also carry a full line of Angle and Globe Valves.

PRICES WILL BE SENT ON APPLICATION.

TABLE OF DIMENSIONS.

Size of Governor..	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	9	10
Diameter of Base Flange.. ..	3½	4	4½	5	5¾	7	8	9	10	11	11	12	14	15	17	18	20
Diameter of Side "	3½	4	4½	5	5¾	6½	7	8	9	10	10	11	13	14	16	17	18
Centre to Side Flange.	2½	2⅞	3¼	3½	4	4½	5	5½	6	6⅝	7¼	8	8¾	9½	10½	11½	13
Centre to Base "	2½	2⅞	3¼	3½	4	4½	5	5½	6	6⅝	7¼	8	8¾	9½	10½	11½	13
Height in inches..	14	16½	19	22½	24½	27½	29	32½	34	38	40	[illegible]	48	52	56	60	64
Radius of Balls.	3	3¼	3½	3¾	4	4¾	5	5¾	6	6¾	7	7¾	8½	9¼	10	10¾	11½
Centre to End of Shaft.....	8	9	10	12	12	14	14	15½	15½	17	17	18½	20	21½	23	24½	26
Diameter of Pulley..	1½	2	2	2½	2½	3	3	3½	3½	4	4	4	5½	5½	7	7	7
Width of Belt....	¾	1	1	1¼	1¼	1½	1½	2	2	2½	2½	2½	3	3	3½	3½	3½
Revolutions per Minute.....	..	...	....	...	....	....	....	....	....	....	..	....	...	...	...	....	....
Dia. Cyl. (300 ft. Piston Speed)	....	4	5	6	7	9	12	14	16	18	20	22	26	31	36	40	45
Dia. Cyl. (400 ft. Piston Speed)	....	3	4	5	6	8	10	12	14	16	18	20	23	27	31	35	39
Dia. Cyl. (500 ft. Piston Speed)	....	....	3½	4½	5	7	9	10	12	14	16	18	21	24	28	31	35
Dia. Cyl. (600 ft. Piston Speed)	...	....	...	[illegible]	4½	6	8	9	11	13	15	16	19	22	25	28	32

Repair List of the Monarch Governor.

In ordering repairs, be careful to give size of Governor, also shop number of Governor, to avoid mistakes.

PRICE LIST OF PARTS.

No.	Name of Part.	Size of Governor.																
		½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8	9	10
1	Valve Chamber	2 75	3 00	3 25	4 00	5 00	6 50	9 00	12 00	16 00	20 00	25 00	30 00	40 00	50 00	62 00	75 00	90 00
2	Bracket	2 25	2 50	3 00	3 50	4 00	5 00	6 00	7 50	9 00	10 50	12 00	14 00	17 00	21 00	26 00	32 00	40 00
3	Hollow Spindle	1 25	1 30	1 40	1 50	1 75	2 00	2 25	2 75	3 00	3 75	4 00	4 50	5 00	6 00	7 00	8 00	9 25
4	Leaf Spring (each)	20	25	30	35	35	40	40	50	50	60	60	70	80	90	1 00	1 10	1 20
5	Balls (each)	50	55	60	65	70	80	90	1 00	1 10	1 25	1 40	1 60	1 90	2 10	2 40	2 70	3 00
6	Valve	90	1 00	1 20	1 50	1 80	2 25	3 00	3 75	4 50	5 50	6 50	7 75	10 00	14 00	20 00	28 00	38 00
7	Gear for Driving Shaft	50	55	60	70	80	90	1 00	1 15	1 30	1 45	1 60	1 90	2 20	2 60	3 00	3 40	3 80
8	Gear for Gear Head	50	55	60	70	80	90	1 00	1 15	1 30	1 45	1 60	1 90	2 20	2 60	3 00	3 40	3 80
9	Cap	50	60	65	75	75	90	90	1 00	1 00	1 25	1 25	1 50	1 75	2 00	2 40	2 80	3 20
10	Valve Stem and Nut	55	60	65	70	75	80	90	1 00	1 15	1 30	1 50	1 70	1 90	2 20	2 50	2 80	3 20
11	Idler Pulley	70	75	80	90	1 00	1 10	1 10	1 25	1 25	1 50	1 50	1 75	2 00	2 30	2 60	3 00	3 40
12	Driving Shaft	1 10	1 20	1 30	1 40	1 50	1 75	1 90	2 20	2 40	2 90	3 20	3 70	4 30	4 80	5 30	6 30	7 50
13	Driving Pulley	1 00	1 10	1 20	1 35	1 50	1 75	1 90	2 10	2 30	2 50	2 75	3 00	3 50	4 00	4 50	5 25	5 75
14	Collar for Aut. Stop	25	30	35	40	45	50	55	60	70	80	90	1 00	1 15	1 30	1 45	1 60	1 70
15	Aut. Stop Weight	1 50	1 70	1 90	2 10	2 30	2 50	2 75	3 10	3 40	4 00	4 50	5 25	5 90	6 75	8 00	9 50	11 00
16	Idler Shaft	75	80	85	90	95	1 00	1 10	1 25	1 50	1 75	2 00	2 40	2 80	3 20	3 70	4 40	5 00
17	Collar for Spindle	40	45	50	55	60	65	70	80	90	1 10	1 30	1 50	1 70	2 00	2 30	2 60	3 00
18	Vertical Connect'g Rod	70	80	90	1 00	1 10	1 20	1 30	1 50	1 75	2 00	2 25	2 60	3 00	3 50	4 20	4 90	5 80
19	Connecting Collars (ea.)	40	45	50	55	60	65	70	80	90	1 00	1 15	1 30	1 50	1 75	2 00	2 25	2 50
20	Stop Lever for Speeder Rod	45	50	55	60	65	75	80	90	95	1 10	1 20	1 30	1 50	1 70	1 90	2 20	2 50
21	Screws for Balls (each)	45	50	55	65	70	85	90	1 00	1 10	1 20	1 30	1 50	1 75	2 00	2 25	2 50	2 75
22	Guard for Balls	50	60	70	80	90	1 00	1 10	1 25	1 40	1 60	1 80	2 00	2 25	2 50	2 90	3 50	4 25
23	Speeder Spring	25	30	35	40	50	60	70	80	90	1 00	1 10	1 30	1 70	2 20	2 80	3 50	4 25
24	Speeder Shaft	25	30	35	40	50	60	75	85	95	1 05	1 15	1 30	1 60	2 00	2 75	3 50	4 30
25	Speeder Fork	80	90	1 00	1 15	1 30	1 50	1 70	2 00	2 25	2 50	2 75	3 00	3 50	4 20	5 00	6 00	7 00
26	Speeder Worm	25	30	35	40	50	60	70	80	90	1 05	1 20	1 40	1 60	1 80	2 00	2 20	2 40
27	Speeder Worm Wheel	40	50	60	70	80	90	1 00	1 15	1 30	1 50	1 75	2 00	2 25	2 50	2 80	3 20	3 60
28	Revolving Gear Head	1 20	1 40	1 70	2 00	2 25	2 50	2 75	3 00	3 30	3 60	4 00	4 60	5 20	6 00	7 20	8 60	10 00
29	Sliding Head	1 20	1 40	1 70	2 00	2 25	2 50	2 75	3 00	3 30	3 60	4 00	4 60	5 20	6 00	7 20	8 60	10 00
30	Conn'g Lever for Aut. Stop	40	45	50	60	70	80	90	1 00	1 10	1 20	1 35	1 50	1 75	2 00	2 50	3 00	3 75
31	Adjustable Valve Link	80	90	1 00	1 15	1 25	1 50	1 60	1 80	2 00	2 50	2 70	3 00	3 50	4 20	5 00	6 00	7 00
32	Upper Notched Lever	1 00	1 20	1 40	1 60	1 80	2 20	2 30	2 50	2 75	3 25	3 50	4 00	4 75	6 00	7 25	8 50	10 00
33	Stuffing Box (2 pieces)	75	85	1 00	1 10	1 20	1 40	1 50	1 75	2 00	2 25	2 50	2 75	3 00	3 30	3 70	4 20	4 80

LEVEY, IND'PLS.